

S
634.92
N7fmn
Winter/Spring
2002

MONTANA STATE LIBRARY
3 0864 1001 5398 3

Winter/Spring 2002

The Forest Management *Newsletter*

STATE DOCUMENTS COLLECTION
JUL 18 2002
MONTANA STATE LIBRARY
1515 E. 6th AVE.
HELENA, MONTANA 59620

Communicating Issues and Ideas Important to the Management of Montana's State Forest Lands

Ramblings of a Wandering Tree Grower

by Pete Van Sickle

I am delighted with the conscientious tree-growing efforts I have seen so far since starting to work with the Forest Management Bureau. I have not yet had much opportunity to get out on the ground in many places. I promise to do so. What I have seen and heard tells me that I have become a member of a good team. It is my strong desire to be as supportive as possible of this tree-growing effort. This support often has very little to do with being out on the ground lovingly stroking the trees.

One of the things that have attracted me to DNRC is the up-front public commitment to the practice of intensive forestry. Intensive forestry may be defined a bit differently among different forestland managers. However it is defined, it should translate into the effort to grow vigorous, healthy trees. This does not happen by accident or by casual effort. The State Forest Land Management Plan, written with much effort and a degree of controversy, is in direct support of this tree-growing effort. It should not be interpreted as a limiting document, but rather as a statement of positive effort (even though it may not always seem that way). I view intensive forestry as the specific effort, within the normal constraints of operation, to grow trees. This includes the correct application of all of the silvicultural tools available to us. If our decisions are correct and we *grow the trees*, all the other desirable attributes of the *forest* will be present.

I am one of those people who never seem to be able to hold a job for very long. Well, at least I haven't kept the same job title for very long throughout my career. That means that I have often needed to pick up my family and go somewhere else. The result has been the opportunity to experience a wide

variety of tree-growing conditions, not all of which have anything to do with the ground. I tell myself, and anyone who will listen, that I am a passionate tree grower. The challenge I give to myself is to grow trees faster and bigger in each location I find myself. That is also the challenge I want to bring to the efforts of the Trust Land Management Division.

So here is the challenge. I challenge the Unit Office(s), working within their respective unit(s), to demonstrate 15 percent to 20 percent increases in the growth rate of two-year-old seedlings, planted or natural, over an established base rate. I propose that a sampling of two-year-old seedlings be measured during the summer of 2002. This serves as the baseline data from which to measure future growth. This baseline data would then be compared to a random selection two years later. I propose that this challenge run until 2010. I also would propose that the Forest Management Advisory Committee establish all appropriate rules to guide this challenge. I would make formal recognition of the winning effort(s).

Growing trees to achieve increased growth rate is not at all straightforward or as simple as the casual observer might think. It is not something that can be accomplished by one person working alone. It takes an entire team to make it happen. It requires careful thought given to silvicultural prescriptions, harvest methods, site preparations, regeneration methods, vegetation management, and slash disposal. It requires time spent in the field making careful decisions about future stand management. It requires diligent contract administration to ensure that the site is ready to go to work. It requires time spent in the office with careful record keeping and coordination of team effort. It requires team trade-offs to enable focus of effort to meet all the responsibilities of the team. It requires the effort of careful and diligent observation, and, no, this cannot be accomplished from the seat of the pickup. It requires

continued on page 2

Ramblings
continued from page 1

that you be willing to learn more about growing trees than you have yet learned.

I hope this friendly challenge sounds like adding some fun to an already challenging profession. It is also the basis of our responsibilities in Trust Land Management. If our duty is to make money for the trusts, then growing more volume from the same ground is the fulfillment of that duty. The primary resource with which we work is the ground. Monetary value is made from the ground up. Remember, selling and harvesting timber is merely the conversion of value to cash. The real work of forestry is growing trees.

Sula Monitoring Report

by Mike O'Herron

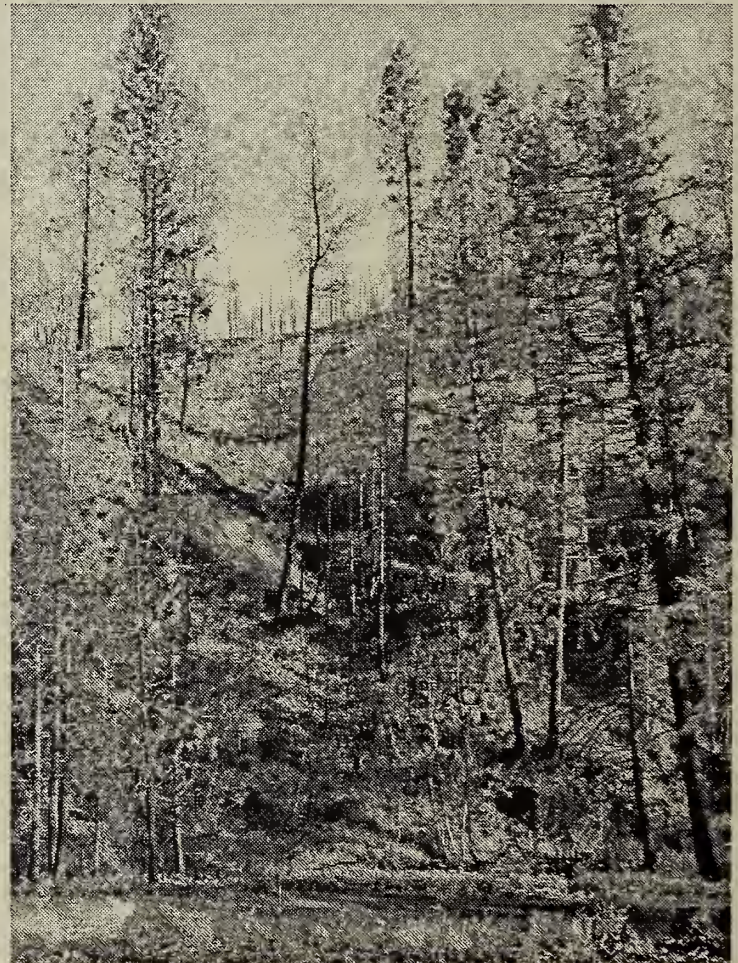
The *Monitoring Report for the Sula State Forest Fire Mitigation, Salvage & Recovery Project* was printed in March. Congratulations to the Hamilton Unit and each and every person who worked on the project and the monitoring report for a job well done.

Here are some of the highlights of the report.

- Over 26 mmbf of timber has been salvaged.
- Sales have generated approximately \$4,534,617 for Montana's schools and \$785,000 for DNRC's Forest Improvement Account.
- BMPs implemented during road obliteration, fire rehabilitation, and fire restoration activities were found to be adequately implemented, effective in controlling erosion, and helpful in establishing vegetation.
- A relatively minor amount of erosion has taken place as a result of the fires and subsequent rainstorms. Over 80 percent of the salvage operations have taken place on frozen or snow-covered ground, which minimized adverse effects on soils. Most of the burned areas have been quick to revegetate with native grasses, forbs, and shrubs.
- Retention of snags and coarse woody debris for the benefit of wildlife met or exceeded project objectives.

- The regeneration effort in progress relies on a combination of natural regeneration and the planting of nursery stock grown from on-site seed collection.
- Photo points were established at 34 representative locations to establish a historical record of the forest's recovery, growth, and management activity. The pictures taken at these photo points will be used to educate land managers and the public about post-fire recovery and the effects of forest management activities like planting and thinning.
- The overall mortality rate of monitored trees one year after the fire was 28 percent. As expected, Douglas-fir had a higher mortality rate than ponderosa pine. Smaller trees had a higher mortality rate than large trees. All of the monitored trees that had 100 percent of the crown scorched died.

The report is posted on the DNRC website at www.state.mt.us/dnrc/eis_ea.html. If you would like a bound copy, contact Mike O'Herron at 542-4302.



Sula State Forest — photo by Brian Long

FMB Reorganization

by Gary Frank

Over the past year the Forest Management Bureau (FMB) has been implementing a new organizational structure. Under this reorganization, the resource management programs and functions of FMB have been removed from the State Land Management Section and split between a new Resource Management Section and the Forest Improvement Section. The Resource Management Section is now responsible for managing the bureau's statewide programs for water, soils, geology, fisheries, noxious weeds, sensitive plants, and riparian grazing resources (see related article). Gary Frank manages these programs.

The Forest Improvement Section was renamed the Ecological Services Section to more accurately describe the broad ecological and biological responsibilities. The Ecological Services Section is responsible for the bureau's statewide programs in forest improvement, right-of-way acquisition, silviculture, biodiversity, wildlife, and old growth, among others. Scott McLeod continues to manage the expanded responsibilities of this section.

The Forest Product Sales Section now carries out the remaining responsibilities of the State Land Management Section, which no longer exists. These responsibilities include forest product sales, marketing, economics, accounting, MEPA compliance, and implementation of the State Forest Land Management Plan. Bruce Rowland manages the Forest Product Sales Section. Bruce came to us after many years of experience as a management forester for the Washington Department of Natural Resources.

The role and duties of the Forest Inventory Section basically remain the same. The only major change was the shift of the FMB economist position to the Forest Product Sales Section.

Fiscal Year 2002 Timber Sale/Permit Status

by Bruce Rowland

Sale Status

Fires have again put extra demands on our program. The Moose Creek fire salvage effort was divided into two phases. Phase I included two timber sales with a combined volume of 5.5 mmbf; logging is nearly completed. The Moose Phase 2

Environmental Impact Statement is currently out for review. The sale is expected to go to the Board of Land Commissioners (board) in June and to be sold in July, if approved. Every effort is being made to get Phase 2 sold as quickly as possible in order to preserve timber value. Thanks to everyone who helped in putting these sales together.

I would also like to recognize the other units that have demonstrated an extraordinary effort to prepare and sell salvage timber since the fires of 2000. These sales include the Bitterroot fire salvages out of the Hamilton Unit; Ryan Gulch out of the Missoula Unit; Maxey Ridge, Moore Gulch, and Wilson Creek out of the Bozeman Unit; Bald Hill out of the Kalispell Unit; and Camas Salvage out of the Plains Unit.

Table 1
Fiscal Year 2002 Timber Sale/Permit Status
(as of June 6, 2002)

Volume sold	41.8 mmbf
Volume harvested	34.4 mmbf
Revenue (stumpage and forest improvement) collected	\$6,828,209
Average price for volume sold	\$191.40/mbf
Volume presently advertised for sale	7.7 mmbf
Volume taken to board	36.8 mmbf
Volume remaining to be approved by board	9.0 mmbf
Volume approved and remaining to be sold in FY 2002 (Dry Creek)	1.8 mmbf

2:1 Update

We project about 43.2 mmbf will be harvested this fiscal year (FY), at an average price of \$221/mbf (\$176/mbf stumpage + \$45/mbf forest improvement), for a total gross revenue of \$9,544,200. Additionally, we project approximately \$5,700,000 in costs, for a revenue/cost ratio of approximately 1.68. As noted above, to date we have harvested 34.4 mmbf, and revenue totals \$6.8 million. This is below our 2:1 goal and is due largely to lower but improving stumpage rates, lower volumes harvested (36.3 mmbf was harvested in FY 01), and increased costs in personal services and operations due to the Moose Creek salvage project. Currently we have 50.73 mmbf under contract.



Resource Management Section Update

by Gary Frank

I'm not sure that many of you are aware of what the new Resource Management Section (RMS) does. In general, the Resource Management Section develops and coordinates statewide programs for water, soils, geology, fisheries, noxious weeds, sensitive plants, and riparian and grazing resources for the Forest Management Bureau. We are responsible for developing, recommending, and implementing policies, practices, standards, and rules for these resources.

The section provides technical assistance and training for these resources to land office specialists and unit office staff. Due to the role of NWLO hydrologists and the recent hiring of the SWLO hydrologist/soil scientist, our routine project involvement is more focused on providing Montana Environmental Policy Act (MEPA) and contract-level input to CLO, NELO, SLO, and ELO timber sales. However, we still have a hand in supporting NWLO and SWLO projects by reviewing MEPA documents and contract packages to ensure that road, soil, water, fish, weeds, and sensitive plant resources are adequately addressed and in compliance with MEPA, the State Forest Land Management Plan (SFLMP), the Endangered Species Act (ESA), and other state and federal laws.

The RMS staff also spends a lot of time coordinating SFLMP implementation, monitoring for road, watershed, fisheries, noxious weeds, and grazing resource management standards. We recently completed and reported on several large monitoring efforts conducted in conjunction with the Sula Fire Mitigation, Salvage, and Recovery Project. Ongoing and planned future monitoring projects include continued monitoring of Sula water quality, Moose Creek Fire Salvage and Reforestation Project soils monitoring, internal Best Management Practices (BMP) audits, noxious weed monitoring, and watershed inventories.

The Resource Management Section has also been pretty busy with the SFLMP rule-making process and the initial DNRC habitat conservation planning process. Both of these projects are large and complex and, therefore, are likely to be major time commitments for the section.

RMS is currently recruiting a fisheries program specialist to oversee and coordinate the fisheries program statewide for DNRC forest management activities. George Mathieus, who now works for the Department of Environmental Quality (DEQ) in Helena, recently vacated the fisheries position. The position was advertised and closed on May 17. We hope to fill the position and have someone on board by July 1.

Inventory Section Update

by Brian Long

The Inventory Section will be awarding a contract in June to conduct stand-level inventory (SLI) on 56,700 acres in the Plains Unit. The SLI data collection will be completed in June 2004.

We currently have active contracts to collect SLI data in the Kalispell and Stillwater Units. The Kalispell SLI data should be completed by the end of this June. The Stillwater Unit SLI data collection should be completed by the end of October 2002.

We have begun the first statewide Department of Natural Resources and Conservation (DNRC) annual inventory update. The units and land offices are beginning to provide the initial information necessary to start preparing new polygon maps. These new maps will be used to let the field foresters know which stands need new, updated SLI data.

We have purchased an iPAQ pocket computer with a global positioning system (GPS) receiver and a copy of ArcPad geographic information system (GIS) software. We will be investigating the utility of this hardware and software for mapping features to be entered into the GIS. Having our GIS maps and data downloaded into the iPAQ will help us do other tasks, such as doing real-time GPS mapping or locating section corners. We will also be investigating the utility of the iPAQ as a data recorder. We intend to set up data entry screens for the stand-level and photo-interpreted (PI) inventory databases and for the INVTRY cruising program. I am sure that we will find other uses for the iPAQ very quickly, if our initial tests are successful. We demonstrated our iPAQ setup during "Techno Night" May 21 at spring training in Bozeman.



Sula State Forest — photo by Jon Hayes

GIS Update

by Donna Riebe

The Geographic Information System (GIS) Section of the Forest Management Bureau has been working on several major projects for the last few months. Primarily, the three GIS interns and myself have been working on getting the forested polygons that were included in a recent photo-interpretive contract digitized and into the GIS map. Because we currently lack a quad-scale base of public land survey sections for the eastern land offices (CLO, ELO, NELO, and SLO), it was difficult to come up with a framework to use as a base for the sections. I decided on using the preliminary parcel data that the Montana Department of Revenue is making available statewide. These data use the Geographic Coordinate Data Base (GCDB) as a framework. GCDB is being developed by the U. S. Bureau of Land Management as the framework for its Land Information System (LIS), and is mandated as the base land lines theme for all federal agency mapping and GIS efforts. We will be moving all of the base layers eventually to this system, and have decided that, since it was available in many areas, it would save effort in the long run, in that the data would have to be digitized once. Currently we have parcel data for the Central Land Office (minus Cascade, Jefferson, and Gallatin Counties, along with some small holes in other counties); the Northeastern Land Office (missing some small areas); the Southern Land Office

(missing Yellowstone County and a large portion of Big Horn County); and the Eastern Land Office. In addition to using the GCDB as a framework for our forested polygons, I have been changing the coding of the parcels from the generic "State of Montana" to "DNRC" where our surface management is unambiguous inside of the section. This will result in a more accurate DNRC management cover than currently exists. Currently I have downloaded the cadastral and GCDB data for 45 of Montana's 56 counties.

In addition, we have received a land cover dataset from the U. S. Geological Survey (USGS) for the entire state that classifies vegetation into a number of broad categories. Preliminary investigation forced the inclusion of the USGS class Orchards/Vineyards/Other in with the Forestland class. The error percentages are low, relative to most satellite data, with accuracy for land cover ranging from 65 percent to 82 percent and the mean error of 10 percent to 15 percent for the percentage of tree canopy (which was important for splitting out forest cover). We hope to use the USGS forestland cover data to determine whether any parcels with significant forest cover were missed by our photo-interpreted inventory in the eastern land offices.

In addition, I have been able to classify DNRC-managed land by land office into several broad classes of surface vegetation. The results of this classification are shown in the following table.

Table 2
Vegetation Class Totals from USGS Land Cover Data
(Percentage of Total DNRC-Managed Areas by Vegetation Class and Land Office)

	Forestland	Shrubland	Cropland	Range or Pasture	Unproductive Land	Extractive	Admin/ Residential	Water
CLO*	14.8	9.1	4.9	70.2	0.1	0.0	0.1	0.9
ELO*	12.1	5.8	6.1	75.4	0.1	0.0	0.1	0.3
NELO*	5.9	3.0	12.6	78.1	0.1	0.0	0.1	0.3
SLO*	12.9	9.7	2.6	74.2	0.0	0.3	0.0	0.3
NWLO	91.5	6.0	0.1	0.9	0.1	0.0	0.2	1.3
SWLO	82.8	12.7	0.0	3.1	0.0	0.0	0.2	1.2

* data from photo-interpreted stands

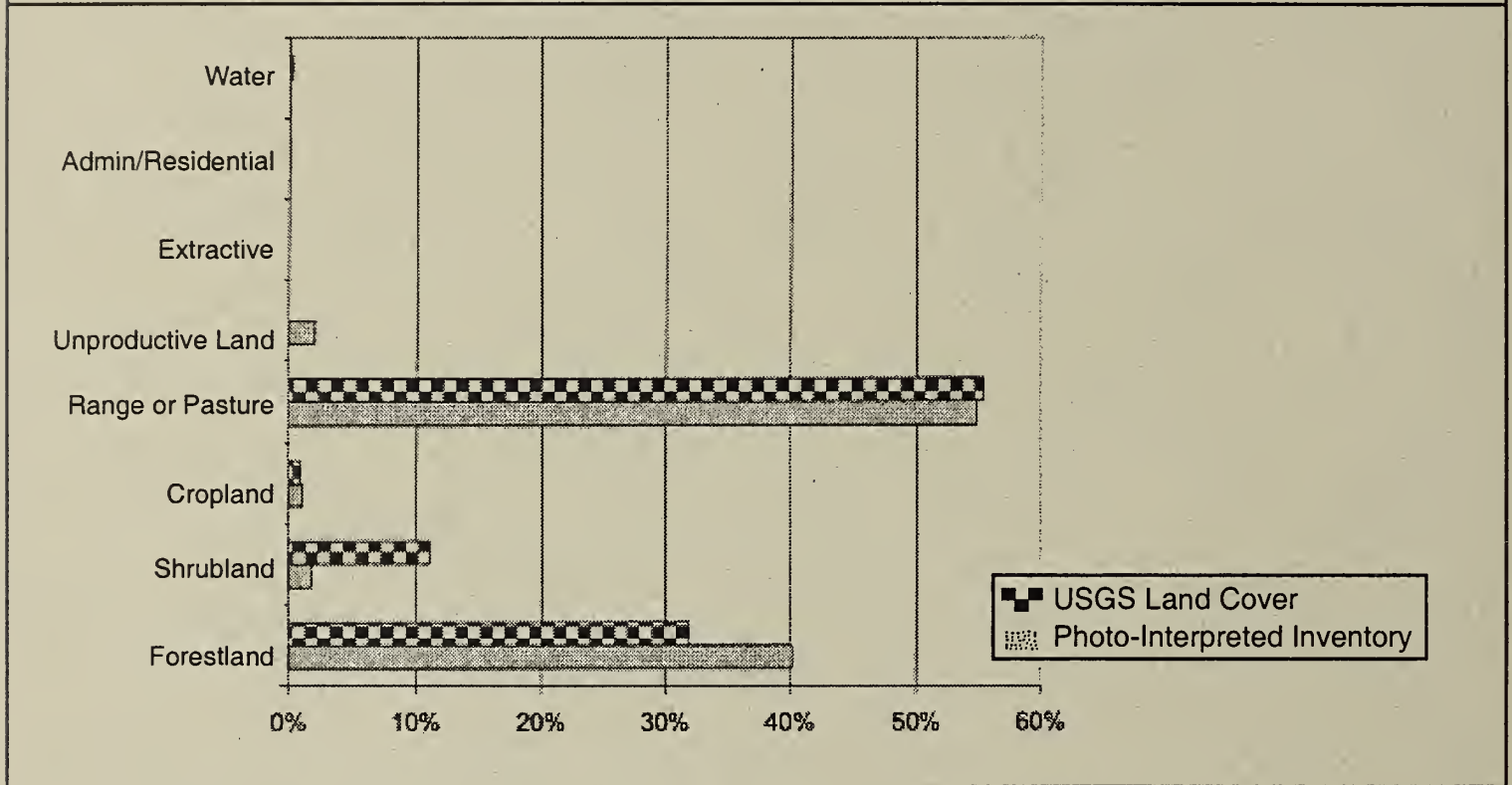
I was also able to directly compare those parcels that had land use data from our recent photo-interpreted inventory of CLO, NELO, SLO, and ELO to the USGS land cover data for the same parcels. The resulting figures were encouragingly similar, as seen in the chart on page 6 of cover classes by data type for the eastern land offices (CLO, ELO, NELO, and SLO). The major difference between the two data types was the higher estimate of shrubland acres by the USGS land cover data set.

We believe the difference is mostly due to the difference in the forestland definitions between the two data sets. The PI inventory classes land as forest if it has ≥ 10 percent crown canopy or density. The USGS land cover system classes land as forest if it has a ≥ 25 percent crown canopy. It is likely that most of the land with 10 percent to 24 percent crown density was classed as shrubland in the USGS land cover database.

continued on page 6

GIS Update
continued from page 5

Figure 1
Proportion of Total Acres in CLO, ELO, NELO, and SLO
by Cover Class and Data Type



Timber Harvesting, Forest Nutrients, and the Intermountain Forest Tree Nutrition Cooperative

by Scott McLeod

The effects of harvesting on the nutrient resources of our forests have been a topic of discussion for several years. Nutrient removals have been identified as causing decreased productivity, increased incidence of insect and disease problems, regeneration problems, and undesirable shifts in species representation.

As evidence mounts regarding the negative effects of nutrient removals, many organizations, including DNRC, have taken steps to minimize the consequences. In some cases, this has included in-woods processing equipment, hauling slash back into the harvest unit, and allowing slash to "cure" for a year and hence to release its nutrients back to the site before burning. These steps have been taken by concerned individuals who recognize that managing for the long term cannot be accomplished without considering the nutrient status of our forested stands.

The importance of nutrients to forest tree growth is often difficult to observe firsthand, and the negative effects of removals can take decades to be visually observed, despite having measurable short-term impacts on the regenerating or retained stand. To appreciate the importance of nutrition, one forester suggested that people are a good example and that, if we look at three generations of the same family lined up in a row, we'd very likely see that the younger individuals are taller and bigger than their parents and grandparents. The obvious reason is not better education, less work, or use of steroids; the reason is better nutrition. Trees respond similarly to nutrition.

The controversy stems from the introduction, in the early 1980s, of equipment designed for whole-tree harvesting. The increased efficiency and decreased logging costs associated with such equipment led to rapid acceptance of its use. It was only later that the effects began to be noticed, including regeneration problems and high mortality in sapling size stands. Now, we are accustomed to the lower logging costs associated with such harvesting, and increased costs will directly affect the bottom line. The argument has often been posed as, "Why would I pay more for other harvesting methods when I cannot see the negative effects of whole-tree harvesting?"

The Intermountain Forest Tree Nutrition Cooperative has been the regional leader in recognizing and quantifying the consequences of nutrient removals from forests. Last year, the steering committee determined that better and more explicit information was needed to help dissuade decision

makers and non-believers from using detrimental techniques. The approach was going to be to conduct some harvesting experiments, using clearcuts, to help develop nutrient budgets for forested stands in order to quantify the actual removals.

However, some recent analysis of data collected by the co-op led us to reassess the need for such a study. We felt it was unlikely that many people would contest the negative effects of whole-tree removals in a clearcut. What we really needed was a tool to help us decide how much removal might be detrimental, and how detrimental. As such, the co-op has decided that we can and should forge ahead with modeling efforts designed to quantify the effects of various levels of removals on nutrient budgets, which would then be used to identify thresholds for concern and allow site-specific decision making. For example, if a clearcut would remove nitrogen, potassium, and boron representing 55 percent of the total available, how much would be removed with a 30 percent basal area removal taken from shade-tolerant species making up the lower canopy levels? When we know the quantity of nutrients being removed, we can make some estimates of the effects on productivity. That knowledge would then be used to weigh the relative costs and benefits of different practices.

Obviously, it is a complicated process to look at and understand without a model. Questions such as "How many nutrients are being added through parent material weathering?" "What's the input associated with rainfall?" and "Where are the nutrients now?" are not easily answered. However, given relatively clean air, atmospheric deposits are probably low. Weathering is slow, so it's not likely that substantial nutrients are replaced in the short term. Previous research provides some information on nutrient allocation to various components such as foliage, soil, understory species, etc. Other complications have to do with differences in how many nutrients are accumulated in different tree species. For example, grand fir and hemlock are relative nutrient hogs. Thinning those species out of a stand may have greater effects than similar levels of harvesting of western larch, Douglas-fir, or ponderosa pine.

One recent project identified the amounts of nitrogen and potassium removed in a whole-tree-harvested clearcut. The initial stand was 247 square feet of basal area, with a quadratic mean diameter of 11.6 inches, on a cedar habitat type. This study found that approximately 300 lbs. of nitrogen and 350 lbs. of potassium were removed with whole-tree harvesting. This represents nearly 50 percent of the available nitrogen and an unknown percentage of the available potassium. Previous work has shown that over 50 percent of

continued on page 8

*Timber Harvesting
continued from page 7*

the available potassium might be removed through whole-tree harvesting. In comparison, the bole-only removals were about 75 lbs. of nitrogen and 200 lbs. of potassium.

In another study, a stand dominated by ponderosa pine in central Oregon was partially harvested. The harvest reduced basal area from 240 square feet to about 145 square feet. In this situation whole-tree removals were 360 lbs. of nitrogen and 300 lbs. of potassium. Bole-only harvest removed about 50 lbs. of nitrogen and 110 lbs. of potassium. In summary, whole-tree removals took approximately 7 times the nitrogen, 2.5 times the potassium, 3 times the sulfur, and 5 times the boron,

as compared to the amounts removed with a bole-only harvest. These are not insignificant quantities of nutrients.

With increased emphasis on improving the bottom line, we need to scrutinize our activities carefully and assess their long-term effects. Whole-tree harvesting and recent efforts to explore biomass harvesting for power co-generation have the potential to seriously damage the long-term productive potential of the lands we manage. With the information to be produced by the co-op, in the next year, we should have a tool to better estimate the nutrient consequences of our actions and thus to make better decisions.

Harey Impressions on the Stillwater State Forest May Provide Insights into Forest Management

By Ross Baty

One bunny track, two bunny tracks, three bunny tracks... Thud!

To the casual observer, the previous sentence partially illustrates some recent activity that took place on the Stillwater State Forest this past fall and winter. Dave Ausband, wildlife biology intern for the Forest Management Bureau, took to snowy forests this year to help DNRC learn more about snowshoe hare abundance and habitat use. Snowshoe hare track counts are a component of a study Dave intends to complete as his senior thesis with cooperative oversight from Dr. Colin Henderson at the University of Montana. A major part of this effort has involved counting snowshoe hare tracks along established transects in young and mature forested stands to search for clues and insights into the ecology of hares. The "thud" mentioned above is the unmistakable sound associated with periodic face-plants and tumbles in deep snow, which are always an inherent part of data collection efforts in difficult winter conditions.

Recent developments regarding the federal listing of the Canada lynx as a threatened species have resulted in concern about their principal prey — snowshoe hares. Much of this concern has been related to forest management practices, and in particular, to pre-commercial thinning treatments and their effects on snowshoe hare abundance.

DNRC has a mandate to manage the state's school trust lands in a manner that generates revenue for trust beneficiaries, and one of the methods that foresters employ to achieve this goal is to pre-commercially thin dense stands of young saplings and small, pole-sized trees to shorten the rotation length for

commercial timber production. The crux of this issue resides in the fact that it is well documented that snowshoe hares use dense, young forests for foraging and for security from predators. Thinning such stands may reduce their suitability for use by snowshoe hares. Thus, lower hare abundance could equate to reduced prey availability for lynx.

Dave's study is intended to address some of the questions facing land managers throughout the Northern Rockies related to pre-commercial thinning within snowshoe hare habitat. More specifically, we hope to address the following questions using snowshoe hare track counts tallied within seven stands (i.e., two mature and five young) that are about 25 acres each in size.

- How much snowshoe hare use occurs in young stands identified for pre-commercial thinning prior to treatment, and how much use occurs in dense, mature stands nearby?
- What is the level of snowshoe hare use in these same stands after pre-commercial thinning has occurred in four of the five young stands? (One stand will be left un-thinned as a control.)
- How do snowshoe hares respond to varied percentages (10 percent and 40 percent) of un-thinned forest patches retained in young, pre-commercially thinned stands?

To get "pre-treatment" estimates of hare use in these habitats, Dave's efforts this winter have focused on obtaining hare track counts in young conifer stands that will undergo thinning treatments this summer. Tracks were also counted within nearby mature stands with dense vegetation to gain broader insights

continued on page 9

Harey Impressions
continued from page 8

into habitat use, and to help identify possible shifts in habitat use by hares once thinning has occurred.

On three separate track count ventures that took place in January, February, and March, 1,300 individual sets of hare tracks were tallied. Interestingly, very preliminary results indicated that most of these tracks occurred within the two mature stands (i.e., 30 percent to 50 percent greater track abundance in mature stands). Fewer generally occurred in the young conifer stands slated for thinning. Average snow depths ranged from 18 inches in January to 40 inches in March. When evaluating these results, it is important to consider that these are winter estimates, and habitat use by snowshoe hares may vary during other seasons of the year.

While trudging along the track transects, Dave actually observed snowshoe hares on seven occasions, and tracks of several predators were noted. Predator tracks included 11 sets of coyote tracks, 1 set of wolf tracks, and 2 sets of bobcat tracks. Predator tracks were generally few and far between and were most commonly observed when the snow surface was crusted

and solid, making it easier for the predators to walk around. Documenting the types and numbers of predator tracks in the area during surveys may help Dave interpret his final track-count results when that time comes.

Because DNRC must fulfill trust obligations as well as comply with the Endangered Species Act, our questions of interest are of pressing importance. Research regarding snowshoe hares and pre-commercial thinning is being conducted throughout northwestern Montana by other researchers as well. This study is a unique and integral part of this larger effort, which we hope will yield additional information that will provide forest managers with greater insight into managing forest resources in a fiscally and biologically sound manner.

We would like to take the opportunity to thank the staff of the Stillwater State Forest for providing us the assistance and resources necessary to carry out project work. Thanks especially to Rick Komenda for his enthusiastic insights and logistical assistance offered at all hours of the day and night!

MEPA Update

by Mike O'Herron

Training

On September 9-12, 2002, we are hosting a training session by the Shipley Group from Utah. The title of the course is "Managing the NEPA/MEPA Process and Writing Effective Documents." The instructor will be Dr. Sid Jensen, who received excellent evaluations the last time he taught the course for us.

The training will be held at the University of Montana, Continuing Education Building. Out-of-towners can lodge at the DoubleTree Inn (ph. 728-3100 "DNRC/MEPA"). We have 30 participants already signed up. If you are interested, we can take only a few more. For a registration flyer or to sign up, contact Mike O'Herron at 542-4302 or moherron@state.mt.us.

MEPA Binders

We made more copies of the *MEPA Guidelines for Forest Management Activities*. They should have made their way

to the folks that requested them by now. It is the 1998 version with only a few minor additions.

Legislative Changes

Some of you have been asking about how the legislative changes to MEPA from the 2001 session will impact our program. Most of the changes were drafted to reduce the sometimes lengthy MEPA delays involving private applicants for permits and approvals from the Department of Environmental Quality. FMB is working on strategies to address those MEPA changes that apply to our projects. You will hear from us as soon as we have something in place.

Reviewing Environmental Documents

Thank you for scheduling 30 days for internal review of your environmental assessments and environmental impact statements. While it does not take each of us that long to review a document, we have to work those reviews into our schedule, along with our other duties. In the near future, some of our schedules will be extra full as we get the HCP/plan amendment/rules process sorted out.



*Persons with disabilities who need an alternative, accessible format of this document should contact DNRC at the address below.
Phone 406-542-4269, fax 406-542-4274.*

The
Forest Management
Newsletter

Communicating Issues and Ideas Important to the Management of Montana's State Forest Lands

Department of Natural Resources and Conservation
Trust Land Management Division
2705 Spurgin Road
Missoula, Montana 59801



Communicating Issues and Ideas Important to the Management of Montana's State Forest Lands

150 copies of this document were published at an estimated cost of \$.68 per copy. The total cost of \$102.00 includes \$102.00 for printing and \$00.00 for distribution.